## **Viking Seminar Information Sheet**

Seminar (Event) Title: Advanced Applications of Fire Protection Systems

**Seminar Description:** Through discussion, activities and interactive labs, this seminar

will explore the components and operation of more complex water-based fire protection systems with a focus on pre-action, deluge, and foam fire sprinkler systems. Topics covered will include system applications, configurations, and components.

**Duration (Days):** 2 days

**Number of Modules:** 7

**Total Instructional Minutes:** 660 (11 hours)

*Instructional minutes do not include the facility tour, breaks, or lunch totaling ~3 hours.* 

**Seminar Format(s):** Lecture, demonstration, in-class and hands-on activity

**Participant Materials:** Sprinkler Guides, Data Sheets and Digital Tools

**Learning Outcomes:** Upon completion of this seminar the attendee will be able to:

1. Identify the components of Deluge/Pre-action Systems and describe their function

2. Recognize the benefits of the Viking SureFire System and explain the system functions

3. Compare the benefits of the various types of Flow Control Systems

4. Recognize the benefits of the Viking Fire Cycle System and explain the system functions

5. Discuss the applications and type of Foam Systems

**Assessment Method(s):** Activity Participation

TITLE: MODULE 1: DELUGE SYSTEMS

**Duration:** (90 min)

**Learning Outcomes:** At the conclusion of this module, the participant will be able to:

1. Identify the application of Deluge Systems

2. Describe the different types of Deluge Systems

3. Recognize the components of Deluge Systems

4. Explain the operation and restoration of Deluge Systems

**Delivery Methods:** Lecture, demonstration, in-class and hands-on activity

**Activity Descriptions:** Data Sheet Reading, Tripping and resetting valves

**Assessment Method:** Activity Participation

TITLE: MODULE 2: VFR400 MULTI HAZARD RELEASE PANEL

**Duration:** (60 min)

**Learning Outcomes:** At the conclusion of this module, the participant will be able to:

1. Identify the application of the release panel

2. Describe the importance of the correct program

3. Explain the location of the associated program wiring diagrams

**Delivery Methods:** Lecture, demonstration, and hands-on activity

**Activity Descriptions:** Programming panels

**Assessment Method(s):** Activity Participation

TITLE: MODULE 3: PRE-ACTION SYSTEMS

**Duration:** (210min)

**Learning Outcomes:** At the conclusion of this module, the participant will be able to:

4. Identify the application of Pre-action Systems

5. Describe the different types of Pre-action Systems

6. Recognize the components of Pre-action Systems

7. Explain the operation and restoration of Pre-action Systems

8. Recognize the benefits of the Viking SureFire Systems, Vacuum Technology, and explain the system functions

**Delivery Methods:** Lecture, demonstration, and hands-on activity

**Activity Descriptions:** Tripping and resetting valves

**Assessment Method(s):** Activity Participation

TITLE: MODULE 4: DAY 1 REVIEW ACTIVITY

**Duration:** (60 min)

**Learning Outcomes:** During this module, participant will be able to:

1. Identify and explain the characteristics of the component they

were provided

**Delivery Methods:** Guided Discussion

**Activity Descriptions:** N/A

**Assessment Method(s):** Activity Participation

TITLE: MODULE 5: FLOW CONTROL SYSTEMS

**Duration:** (150 min)

**Learning Outcomes:** At the conclusion of this module, participant will be able to:

2. Identify the application of Flow Control Systems

3. Describe the different types of Flow Control Systems

4. Recognize the components of Flow Control Systems

5. Explain the operation and restoration of Flow Control Systems

6. Recognize the benefits of the Viking Fire Cycle System and

explain the system functions

**Delivery Methods:** Demonstration w/Activity

**Activity Descriptions:** Riser Lab

**Assessment Method(s):** Activity Participation

TITLE: MODULE 6: VIKING FOAM SYSTEM

**Duration:** (30 min)

**Learning Outcomes:** At the conclusion of this module the participant will be able to:

1. Explain the application of foam systems

2. Discuss foam system terminology

3. Identify foam systems components (concentrate, proportioning

and delivery)

**Delivery Methods:** Lecture & Demonstration

**Activity Descriptions:** Videos and Suppression Lab

**Assessment Method(s):** Activity Participation

TITLE: MODULE 7: COURSE REVIEW ACTIVITY

**Duration:** (60 min)

**Learning Outcomes:** During this module the participant will be able to:

1. Answer questions within the activity, independently through

explanation of associated course subjects.

**Delivery Methods:** Guided Discussion

**Activity Descriptions:** N/A

**Assessment Method(s):** Activity Participation